Examiner's Amendments to the Claims:

Please cancel claims 67-76.

Claims 31-34, 36, 50-62, 65 and 66 have been amended as follows:

31   (Currently amended). An isolated molecule [which consists of an amino acid sequence] that binds to the hepreceptor, wherein said [hepreceptor binding sequence] molecule consists of 5 to 41 amino acids containing at least 5 consecutive amino acids of SEQ D NO[.]: 29.

32.   (Currently amended). The molecule, according to claim 31, wherein [the hepreceptor binding sequence] said at least 5 consecutive amino acids are located at positions 1-13 in SEQ ID NO[.]:29.

33   (Currently amended). The molecule, according to claim 31, wherein said [hepreceptor binding sequence] molecule consists of from 5 to 14 amino acids.

34   (Currently amended). An isolated molecule [which consists of an amino acid sequence] that binds to the hepreceptor, wherein said [hepreceptor binding sequence] molecule consists of an amino acid sequence selected from the group consisting of:

MREKEELMLRLQDXaaEEKTKKAERELSEQIQRALQ (SEQ ID NO[.]:2);

EREKE (SEQ ID NO[.]:16);

EREKEQMMREKEEL (SEQ ID NO[.]:17);

KEELM (SEQ ID NO[.]:18);

KEELMLRLQDYEE (SEQ ID NO[.]:19);

KEELMLRLQDYpEE (SEQ ID NO[.]:20);

EELMLRLQDYEE (SEQ ID NO[.]:21);

EELMLRLQDYpEE (SEQ ID NO[.]:22);

ELMLRLQDYEE (SEQ ID NO[.]:23);

ELMLRLQDYpEE (SEQ ID NO[.]: 24);

MLRLQ (SEQ ID NO[.]:25);

QDYEE (SEQ ID NO[.]:26); and

QDYpEE (SEQ ID NO[.]:27).

36   (Currently amended). Please replace "SEQ ID NO." with "SEQ ID NO:".

50   (Currently amended). Please replace "SEQ ID NO." with "SEQ ID NO:".

51   (Currently amended). Please replace "SEQ ID NO." with "SEQ ID NO:".

52   (Currently amended). Please replace "SEQ ID NO." with "SEQ ID NO:".

53   (Currently amended). Please replace "SEQ ID NO." with "SEQ ID NO:".

54   (Currently amended). Please replace "SEQ ID NO." with "SEQ ID NO:".

55   (Currently amended). Please replace "SEQ ID NO." with "SEQ ID NO:".

56   (Currently amended). Please replace "SEQ ID NO." with "SEQ ID NO:".

57   (Currently amended). Please replace "SEQ ID NO." with "SEQ ID NO:".

58   (Currently amended). Please replace "SEQ ID NO." with "SEQ ID NO:".

59   (Currently amended). Please replace "SEQ ID NO." with "SEQ ID NO:".

60   (Currently amended). Please replace "SEQ ID NO." with "SEQ ID NO:".

61   (Currently amended). Please replace "SEQ ID NO." with "SEQ ID NO:".

62   (Currently amended). A method for upregulating the immune system in a
patient with cancer, Human Immunodeficiency Virus (HIV), or a bacteria
infection, wherein said method comprises administering[,] to [a] said patient [with
cancer, Human Immunodeficiency Virus (HIV), or a bacterial infection,] an
effective amount of a molecule [which consists of an amino acid sequence] that
binds to the hepreceptor, wherein said [hepreceptor binding sequence] molecule
consists of 5 to 41 amino acids containing at least 5 consecutive amino acids of
SEQ ID NO[.]:29; wherein the administration of said molecule results in
upregulation of the immune system in the patient.

65   (Currently amended). The method, according to claim [64] 62, wherein
said [hepreceptor binding sequence] molecule has between 5 and 14 amino acids.

66. (currently amended) [The] A method[, according to claim 64] for
upregulating the immune system in a patient with cancer, Human
Immunodeficiency Virus (HIV), or a bacteria infection, wherein said method
comprises administering to said patient an effective amount of a molecule that

binds to the hepreceptor, wherein said molecule consists of an amino acid

sequence selected from the group consisting of:

MREKEELMLRLQDXaaEEKTKKAERELSEQIQRALQ (SEQ ID NO[.]: 2);

EREKE (SEQ ID NO[.]:16);

EREKEQMMREKEEL (SEQ ID NO[.]:17);

KEELM (SEQ ID NO[.]:18);

KEELMLRLQDYEE (SEQ ID NO[.]:19);

KEELMLRLQDYpEE (SEQ ID NO[.]:20);

EELMLRLQDYEE (SEQ ID NO[.]:21);

EELMLRLQDYpEE (SEQ ID NO[.]:22);

ELMLRLQDYEE (SEQ ID NO[.]:23);

ELMLRLQDYpEE (SEQ ID NO[.]: 24);

MLRLQ (SEQ ID NO[.]:25);

QDYEE (SEQ ID NO[.]:26); and

QDYpEE (SEQ ID NO[.]:27).